

CLAIMS

1. A dust control mat having a textile layer and a backing layer, wherein the textile layer includes a spacer fabric having a first fabric layer that forms the upper surface of the mat, a second fabric layer that forms the lower surface of the textile layer and an intermediate pile layer that interconnects and spaces the first and second fabric layers.
2. A dust control mat according to claim 1, in which the first fabric layer comprises a mesh having a number of openings.
3. A dust control mat according to claim 2, in which the openings have a width of 0.5-10mm, preferably 1-4mm, more preferably 2-3mm.
4. A dust control mat according to any one of the preceding claims, in which the first fabric layer is a knitted fabric of approximately gauge 11.
5. A dust control mat according to any one of the preceding claims, in which the first fabric layer is made of a multifilament yarn, preferably polyester yarn.
6. A dust control mat according to claim 5, in which the first fabric layer is made of a yarn having a decitex of 100-200, preferably 136-167, more preferably approximately 150.
7. A dust control mat according to any one of the preceding claims, in which the second fabric layer has a substantially closed structure.
8. A dust control mat according to any one of the preceding claims, in which the second fabric layer is a knitted fabric of approximately gauge 22 or higher.
9. A dust control mat according to any one of the preceding claims, in which the second fabric layer is made of a multifilament yarn, preferably polyester yarn.
10. A dust control mat according to claim 9, in which the second fabric layer is made of a yarn having a decitex of 100-200, preferably 136-167, more preferably approximately 150.

11. A dust control mat according to any one of the preceding claims, in which the intermediate pile layer has a thickness of 2-10mm, preferably approximately 4-6mm.
12. A dust control mat according to any one of the preceding claims, in which the intermediate pile layer is made from a monofilament yarn having a diameter in the range 0.04-3mm, preferably 0.05-0.3mm, more preferably 0.1-0.2mm.
13. A dust control mat according to any one of the preceding claims, in which the intermediate pile layer is made from a synthetic monofilament yarn, preferably polyester yarn.
14. A dust control mat according to any one of the preceding claims, in which the textile layer is a warp knit fabric, preferably a Raschel knit fabric.
15. A dust control mat according to any one of the preceding claims, wherein the backing layer is bonded to the second fabric layer.
16. A dust control mat according to any one of the preceding claims, wherein the backing layer is made of rubber, preferably nitrile rubber.
17. A dust control mat according to claim 16, wherein the thickness of the rubber backing layer is from 0.5mm to 5mm, preferably 0.8mm to 3mm.
18. A dust control mat according to claim 16 or claim 17, in which the rubber backing layer is vulcanised to the second fabric layer.
19. A dust control mat according to any one of the preceding claims, wherein the textile layer is printed.
20. A dust control mat according to claim 19, in which the textile layer is printed with an image having an observable resolution of at least 75dpi.
21. A dust control mat according to any one of the preceding claims, wherein the textile layer has an area of at least 0.2m², preferably at least 1m².
22. A method of manufacturing a dust control mat, the method including the steps of bonding a backing layer to a textile layer that includes a spacer fabric having a first fabric layer, a second fabric layer and an intermediate pile layer that interconnects and spaces the first and second fabric layers.

23. A method according to claim 22, in which the spacer fabric is a knitted fabric, preferably a warp knitted fabric, more preferably a Rachel knit fabric.
24. A method according to claim 22 or claim 23, in which the first fabric layer comprises a mesh having a number of openings.
25. A method according to claim 24, in which the second fabric layer has a substantially closed structure.
26. A method according to any one of claims 22 to 25, wherein a backing layer of rubber is vulcanised to the textile layer in a heated press.
27. A method according to any one of claims 22 to 26, wherein the textile layer is printed using a sublimatic printing process.
28. A method according to claim 27 when dependent on claim 26, wherein the textile layer is printed during the backing process.
29. A dust control mat having a textile layer that includes a spacer fabric having a first fabric layer that forms the upper surface of the mat, a second fabric layer that forms the lower surface of the textile layer and an intermediate pile layer that interconnects and spaces the first and second fabric layers.